# Hollow use by vertebrates in the Top End of the Northern Territory

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ABSTRACT

Information on forest use and dependence on tree hollows was collated for vertebrates in the Top End of the Northern Territory. The proportion of the total fauna that used hollows was 40% for mammals, 18% for birds, 20% for reptiles and 13% for frogs. Mammals had the highest proportion of species that: used forest; were forest dependent; used tree hollows; and the greatest proportion of forest species that used hollows frequently. Birds had the highest proportion of species that did not use forest but, because of their high numbers of species, they had the highest number of species using hollows. Only the reptiles had a consistently higher proportion of hollow-using species in the Top End when compared with national figures and two southern regional areas (Tasmania and south-west Western Australia) where forest was abundant. A greater proportion of threatened species are forest dependent compared with non-threatened species but the proportion of threatened and non-threatened species that use hollows did not differ. Increased fire intensity in areas with exotic, high biomass pasture grasses and extraction of forest products, particularly didgeridoos, may be impacting on hollow availability at a local level.

**Key words:** tree hollows, forest, birds, mammals, reptiles, frogs, Northern Territory

## Introduction

There has been a great deal of research focused on the use of tree hollows by vertebrates in forest areas in southern Australia (Saunders *et al.* 1982; Lunney *et al.* 1988; Lindenmayer *et al.* 1990a; Haseler and Taylor 1993; Gibbons *et al* 2002). This has probably occurred because of the threat posed to hollow dwelling species from large scale logging operations (Recher *et al.* 1980; Lindenmayer *et al.* 1990b; Gibbons and Lindenmayer 1997). In contrast, in the north of the Northern Territory there is presently only a very low level of forestry activity (Taylor 2002) and very few studies have been undertaken into hollow use by vertebrates. Examples are Tidemann *et al.* (1992) who examined hollow use by two species of finches and Kurucz (2000) who looked at hollow selection by Red-tailed Black-cockatoos. Saunders *et al.* (1982), Ambrose (1982) and Gibbons and Lindenmayer (2002) have reported on the proportions of species using hollows on an Australia-wide basis. Braithwaite *et al.* (1985) is the only study that has reported on hollow use by fauna in Northern Australia (in Kakadu National Park). They reported the percentages of species of mammals, birds and reptiles in five habitat types that use hollows but only identified some of the hollow-using species. This paper collates information on the use of hollows by vertebrates in the Top End of the Northern Territory and compares the rate of use by species here with that reported for the whole of Australia.

## Methods

For the purposes of this paper, Top End species were taken to be those occurring in areas with an average annual rainfall of 800 mm or greater (Fig. 1). Occasional vagrants or rarely recorded species were not included nor were arid adapted species whose northern distribution just reached the southern limits of the Top End region. Coastal species, such as waders, and seabirds were not included unless they made use of mangroves or were frequently recorded inland. Aquatic species (e.g. fish, file snakes, crocodiles, turtles) were not included. Those species considered threatened in the Northern Territory are listed on the web site of the Parks and Wildlife Service (www.nt.gov.au/ipe/paw).

Hollows in this paper are considered to be cavities in standing stumps and trees. Common names for mammals are from Strahan (1995), for birds from Morcombe (2000) and for reptiles and frogs from Stanger *et al.* (1998). Forest is defined as an area dominated by trees with a height exceeding two metres and a crown cover of overstorey strata equal to or greater than 20 per cent (National Forest Inventory 1998). This includes communities such as mangroves and *Melaleuca* swamp forest. Use of forest by species, considered across the whole of their range, was classified into three categories:

D - dependent i.e. only regularly uses forest habitats;

O - optional or occasional i.e. can forage and/or breed

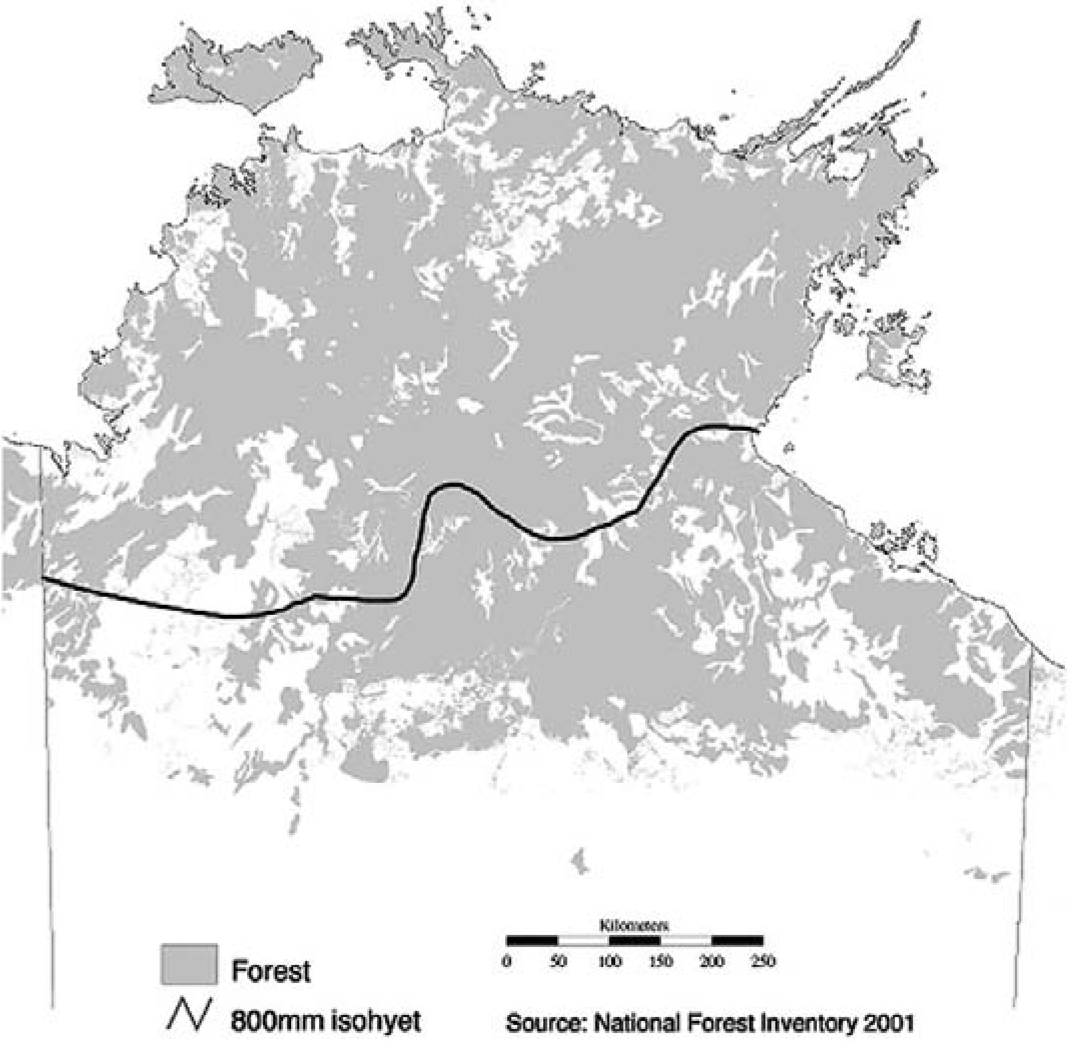

**Figure 1.** Location of forest in the Northern Territory and the section of the 800 mm rainfall isohyet (data for 1961 to 1990) taken to delineate the Top End for the purposes of this study.

in vegetation types other than forest. This category includes species such as the Green Pygmy Goose *Nettapus pulchellus* that only ever use forest as a nesting resource;

N - does not use forest for foraging, roosting or breeding.

Hollow use by species was divided into three classes:

F - frequently or always uses tree hollows for nesting or roosting

O - occasionally uses tree hollows

N - does not use tree hollows.

Chi-square tests were used to compare the frequencies of hollow-using species in different categories.

## Results

A list of Top End species along with their use of forest and tree hollows is given in Appendix 1. Frogs and reptiles had a small percentage of species not using forest with birds having the highest percentage of non-forest species and mammals having none (Table 1). Mammals and birds had the greatest percentage of species that were forest dependent with frogs having the lowest.

**Table 1:** Forest use by vertebrate groups

| Group | No. of species | % not using forest | % optional or occasional forest users | % forest dependent |
|---|---|---|---|---|
| Frogs | 32 | 6 | 91 | 3 |
| Reptiles | 147 | 4 | 76 | 20 |
| Birds | 265 | 17 | 48 | 35 |
| Mammals | 70 | 0 | 69 | 31 |

In all groups the number of species that were forest dependent was less than the number of non-dependent forest users. The majority of forest species in all groups did not use hollows (Table 2). The proportion of species using hollows was significantly greater for dependent than for non-dependent forest users for reptiles ($\chi^2=8$, $p<0.01$) and mammals ($\chi^2=14$, $p<0.001$) but not for birds (Table 2). For each group, for those species that used hollows the proportion that used them frequently was not significantly different ($\chi^2$) between dependent and non-dependent forest users. The proportion of forest species that were frequent hollow users was greater in mammals (27%), than in birds (14%), frogs (7%) or reptiles (6%). The proportion of forest species that used hollows at any frequency was 40% for mammals, 21% for birds, 21% for reptiles and 13% for frogs.

**Table 2:** Percentage of optional or occasional and dependent forest-using species for each vertebrate group in each of the hollow use categories (N – did not use tree hollows; O – occasionally used tree hollows; F – frequently or always used tree hollows for nesting or roosting).

| Group<br>Forest use | No. of species | Hollow use<br>% N | <br>% O | <br>% F |
|---|---|---|---|---|
| **Frogs** | | | | |
| Optional | 29 | 86 | 7 | 7 |
| Dependent | 1 | 100 | 0 | 0 |
| **Reptiles** | | | | |
| Optional | 111 | 84 | 12 | 4 |
| Dependent | 30 | 60 | 27 | 13 |
| **Birds** | | | | |
| Optional | 127 | 80 | 9 | 11 |
| Dependent | 92 | 76 | 6 | 18 |
| **Mammals** | | | | |
| Optional | 48 | 75 | 10 | 15 |
| Dependent | 22 | 27 | 18 | 55 |

**Table 3:** Comparison of forest dependence and hollow use within faunal groups from the Top End.

| Group | No. of species | No. of forest dependent species | No. of hollow-using species |
|---|---|---|---|
| **Frogs** | | | |
| Hylidae | 19 | 0 | 4 |
| Myobatrachidae | 11 | 0 | 0 |
| Microhylidae | 1 | 0 | 0 |
| Ranidae | 1 | 1 | 0 |
| **Reptiles** | | | |
| Agamidae | 10 | 3 | 5 |
| Snakes | 30 | 6 | 7 |
| Legless lizards & blind snakes | 17 | 0 | 0 |
| Geckoes | 20 | 3 | 8 |
| Skinks | 57 | 14 | 2 |
| Varanids | 13 | 3 | 8 |
| **Birds** | | | |
| Ducks (Anatidae) | 10 | 0 | 6 |
| Other waterbirds | 62 | 1 | 1 |
| Cockatoos, parrots & lorikeets | 11 | 6 | 10 |
| Owls | 6 | 3 | 5 |
| Kookaburra & kingfishers | 5 | 4 | 5 |
| Birds of prey | 24 | 5 | 2 |
| Pardalotes & finches (Pardalotidae & Passeridae) | 14 | 5 | 4 |
| Others | 133 | | |
| **Mammals** | | | |
| Possums and gliders | 3 | 2 | 2 |
| Dasyurids | 11 | 3 | 4 |
| Bats | 28 | 12 | 18 |
| Rodents | 17 | 5 | 4 |
| Others | 11 | 0 | 0 |
| Threatened species | 21 | 11 | 6 |

Among the frogs the only forest dependent species was from the Ranidae, but all four hollow users were from the Hylidae (Table 3). For the reptiles the skinks were the most specious group and had the highest number of forest dependent species. However, the geckoes and varanids contained the largest number of hollow-using species and the varanids contained the highest percentage of species that used hollows (62%). For the birds the cockatoo/parrot group contained the highest number of hollow-using species with the ducks, owls, kookaburra/kingfisher and pardalote/finch groups having four or more hollow-using species (Table 3). Other hollow users were spread through a variety of taxonomic groups. For the mammals the possums and gliders show a high proportion of species that are forest dependent and that use hollows, as occurs in forests in southern Australia. However, the overall number of species in this group is small (Table 3). The bats are the most specious group and show a high forest dependence and use of hollows. The dasyurids and rodents both have four hollow-using species. The proportion of species that are forest dependent was significantly different between threatened (52%) and non-threatened (27%) species ($\chi^2=6.5$, $p<0.05$) but the proportion of species that used hollows did not differ between threatened (29%) and non-threatened species (18%) (Table 3).

When the proportion of the total fauna that used hollows is compared with figures collated at a national level there appears to be a greater proportion of reptiles and mammals using hollows in the Top End (Table 4). However, if the Top End figures for hollow use by species using forest are compared with two other regions where forest is abundant (Tasmania and forested areas in south west Western Australia), the proportion of mammals using hollows is lower, but the trend for higher use by reptiles remains (Table 5).

**Table 4:** Comparison of estimates of the percentage of species that use hollows at a national level (Gibbons and Lindenmayer 2002) and in the top End of the Northern Territory. For the national figures the species for which evidence of hollow use was obtained in this study, but not in Gibbons and Lindenmayer (2002), were included as hollow users.

| | Australia | Top End of NT |
|---|---|---|
| Frogs | 13 (4[1]) | 13 |
| Reptiles | 13 (6[1]) | 20 (19[2]) |
| Birds | 15 | 18 |
| Mammals | 31 | 40 |

[1] Values when species for which hollow use is presumed by Gibbons and Lindenmayer (2002) and not yet demonstrated are counted as not using hollows.

[2] Value when freshwater species are also included.

**Table 5:** Comparison of the percentage of forest-using species that use hollows in the Northern Territory, south west Western Australia and Tasmania.

| | Tasmania | South west WA[5] | Top End of NT |
|---|---|---|---|
| Frogs | 6[1] | 5 | 13 |
| Reptiles | 6[2] | 8 | 21 |
| Birds | 34[3] | 19 | 21 |
| Mammals | 50[4] | 50 | 40 |

[1] R. Swain and R. Brereton pers. comm.

[2] A. Dudley pers. comm. Niveoscinus pretiosus is the only reptile recorded from hollows in standing trees.

[3] Collated from Morcombe (2000), Taylor (1991) and Gibbons and Lindenmayer (2002).

[4] Collated from Taylor (1991) with additional hollow use information from Gibbons and Lindenmayer (2002). Aquatic species (platypus and water rat) not included as forest species.

[5] Collated from Abbott and Christensen (1996), Abbott (1999) and Abbott and Whitford (2002) and for frogs from Gibbons and Lindenmayer (2002).

## Discussion

Tree hollows are an extremely important resource for wildlife for roosting and nesting. Different species tend to select hollow-bearing trees with different characteristics (Lindenmayer *et al.* 1991a). The entrance size of hollows used by different species is loosely related to body size (Saunders *et al.* 1982; Tidemann and Flavel 1987) and different preferences are shown by species in relation to the depth, width and volume of the hollow (Haseler and Taylor 1993; Whitford 2001). There is a strong correlation between the number of trees with hollows and the distribution and abundance of forest dependent fauna (Lindenmayer *et al.* 1990c, 1991b; Kavanagh *et al.* 1995).

The proportion of species that were hollow-users varied both between and within major taxonomic classes (frogs, reptiles, birds and mammals). There are various factors (e.g. predation, thermoregulation, prey availability) that may have provided selection pressure to adopt the use of hollows for shelter or breeding (Gibbons and Lindenmayer 2002) and these will vary between species with different ecology and body size. There may also be phylogenetic factors associated with hollow use, with this trait inherited from ancestral species (Van Haartman 1957).

Mammals were most dependent on hollows with the highest proportion of forest species, hollow users and frequent hollow users. However, because of the large absolute numbers of species, birds are the group with the greatest number of species using hollows. Forest dependence as a trait was associated with a higher proportion of hollow-using species in reptiles and mammals, but not in birds. This may be influenced by the flight capacity of birds. If reptiles and (non-chiropteran) mammals use hollows then they must have evolved some degree of arboreality, whereas most birds can reach tree hollows without evolving special arboreal traits. It is interesting to note that forest dependence did not lead to increased frequency of use of hollows by species in our analysis. However, the categorisation of this factor was coarse and hence this relationship needs further investigation.

It appears that reptile and mammal species in the Top End have a higher rate of hollow use than indicated by figures at a national level recently collated by Gibbons and Lindenmayer (2002). However, national figures obviously include a large number of species that occur in treeless areas. When the Top End figures are compared with two regions in the south with substantial tree cover (Tasmania and south-west of Western Australia) only the reptiles showed a consistently higher rate of use of hollows. The number of forest species in the Top End reptile fauna (141) is much greater than in the two other regions (16 and 60). Morton and James (1988) have argued that the high diversity of reptiles in arid Australia is a consequence of higher numbers of termites, a major agent of hollow formation (Perry *et al.* 1985; Wilkes 1982). The presence of termites appears to have encouraged arboreality for foraging and Gibbons and Lindenmayer (2002) believe that this could possibly have encouraged hollow use. However, the highest proportion of hollow-using species occurs in the varanids, a group that is not heavily dependent on termites.

Braithwaite *et al.* (1985) sampled fauna (and presumably hollow use, but this is not clear) on 1 to 3 plots (80x30 m) per site at 30 sites across five different habitat types in Kakadu National Park in the Top End. They do not report overall figures for species using hollows, but provide figures broken down by forest type. Their figures range from 14 to 23% for birds, 25 to 56% for mammals, 20 to 39% for reptiles and 17 to 20% for frogs. Values from our collation of Top End forest-using species are comparable for birds and mammals, but appear to be lower for reptiles and frogs. Braithwaite *et al.* (1985) did not list all the species that occurred in each forest type or those that were considered to use hollows. Hence it is difficult to say whether they recorded use in species we did not classify as hollow users or whether hollow users made up a higher proportion of species in their forest sites. The differences, if real, may relate to the different scales in Braithwaite *et al.* (1985) and our study.

In the Top End a higher proportion of threatened species were forest dependent compared with non-threatened species but threatened species did not differ from non-threatened species in the proportion that were hollow users. Thus it appears that a threatening process that has not limited the availability of hollows is operating on forest ecosystems. This factor may be inappropriate fire regimes (Woinarski *et al.* 2001) but other factors such as predation from feral cats *Felis catus* may also be involved. Increased fire intensities in many areas, associated with cessation of traditional Aboriginal burning (Bowman and Panton 1993), and increased biomass of fuels from introduced pasture grasses (Barrow 1995), could eventually lead to increased mortality of larger trees (Williams *et al.* 1999) and hence loss of hollows. In the Top End to date there has probably been no large scale threatening process acting on hollow availability or the occurrence of forest per se as occurs in some regions in southern Australia (from wholesale clearing of forests in some regions and from large scale logging in others). However, the rate of forest clearing is increasing due to agricultural, horticultural and timber plantation development. Harvesting of forest products may also have an impact at a local level, particularly in relation to didgeridoo harvesting where hollow stems and branches are targeted.

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# APPENDIX I

**Appendix 1:** List of Top End vertebrates indicating:

- Forest use (D = dependent i.e. only regularly uses forest habitats; O = optional or occasional i.e. can forage and/or breed in vegetation types other than forest; N = does not use forest for foraging, roosting or breeding.
- Use of tree hollows for roosting or nesting (F = frequently or always uses tree hollows for nesting or roosting; O = occasionally uses tree hollows; N = does not use tree hollows).
- Source of information on hollow use by a species: 1= Gibbons and Lindenmayer 2002; 2 = Strahan 1995; 3 = Morcombe 2002; 4 = Braithwaite *et al.* 1985; 5 = Tidemann *et al.* 1992; 6 = Marchant and Higgins 1993; 7 = J. Woinarski pers. obs.; 8 = Churchill 1998; 9 = Higgins 1999; 10 = Gavin Bedford, pers. comm.; 11 = Friend *et al.* 1992; 12 = A. Dudley pers. comm; 13 = Murphy 2002; 14 = Griffiths *et al.* 2002

Species that only rarely occur in the Top End were not included. (T) = classified as threatened in the NT.

| Family | Species name | Common name | Forest use | Hollow use | Source for hollow use |
|---|---|---|---|---|---|
| **FROGS** | | | | | |
| **Hylidae** | *Cyclorana australis* | Giant Frog | O | N | |
| | *Cyclorana longipes* | Long-footed Frog | O | N | |
| | *Cyclorana maculosa* | Daly Waters Frog | O | N | |
| | *Cyclorana vagita* | Wailing Frog | N | N | |
| | *Litoria bicolor* | Northern Dwarf Tree Frog | O | N | |
| | *Litoria caerulea* | Green Tree Frog | O | F | 1 |
| | *Litoria coplandi* | Saxicoline Tree Frog | O | N | |
| | *Litoria dahli* | Dahl's Aquatic Frog | O | N | |
| | *Litoria inermis* | Peters' Frog | O | N | |
| | *Litoria meiriana* | Rockhole Frog | O | N | |
| | *Litoria microbelos* | Javelin Frog | O | N | |
| | *Litoria nasuta* | Rocket Frog | O | N | |
| | *Litoria pallida* | Pale Frog | O | N | |
| | *Litoria personata* | Masked Frog | O | N | |
| | *Litoria rothii* | Roth's Tree Frog | O | O | 1 |
| | *Litoria rubella* | Desert Tree Frog | O | F | 7 |
| | *Litoria splendida* | Magnificent Tree-frog | O | O | 7 |
| | *Litoria tornieri* | Tornier's Frog | O | N | |
| | *Litoria wotjulumensis* | Wotjulum Frog | O | N | |
| **Myobatrachidae** | *Crinia bilingual* | Bilingual Froglet | O | N | |
| | *Crinia remota* | Remote Froglet | O | N | |
| | *Limnodynastes convexiusculus* | Marbled Frog | O | N | |
| | *Limnodynastes depressus* | Flat-headed Frog | N | N | |
| | *Limnodynastes ornatus* | Ornate Burrowing Frog | O | N | |
| | *Megistolotis lignarius* | Woodworker Frog | O | N | |
| | *Notaden melanoscaphus* | Northern Spadefoot Toad | O | N | |
| | *Uperoleia arenicola* | Jabiru Toadlet | O | N | |
| | *Uperoleia borealis* | Northern Toadlet | O | N | |
| | *Uperoleia inundata* | Floodplain Toadlet | O | N | |
| | *Uperoleia lithomoda* | Stonemason Toadlet | O | N | |
| **Microhylidae** | *Sphenophryne adelphe* | Northern Territory Frog | O | N | |
| **Ranidae** | *Rana daemeli* (T) | Water Frog | D | N | |
| **REPTILES** | | | | | |
| **Agamidae** | *Chelosania brunnea* | Chameleon Dragon | D | O | 7 |
| | *Chlamydosaurus kingii* | Frilled Lizard | D | O | 1 |
| | *Ctenophorus caudicinctus* | Ring-tailed Dragon | O | N | |
| | *Diporiphora albilabris* | White-lipped Two-line Dragon | O | N | |
| | *Diporiphora bennettii* | Robust Two-line Dragon | O | N | |
| | *Diporiphora bilineata* | Two-line Dragon | O | N | |
| | *Diporiphora magna* | Yellow-sided Two-line Dragon | O | O | 7 |
| | *Lophognathus gilberti* | Gilbert's Lashtail | O | O | 7 |
| | *Lophognathus temporalis* | Swamplands Lashtail | D | O | 7 |
| | *Tympanocryptis uniformis* | Even-scaled Earless Dragon | N | N | |
| **Boidae** | *Antaresia childreni* | Children's Python | O | O | 7, 12 |

| Family | Species name | Common name | Forest use | Hollow use | Source for hollow use |
|---|---|---|---|---|---|
| | *Aspidites melanocephalus* | Black-headed Python | O | N | |
| | *Liasis fuscus* | Water Python | O | N | |
| | *Liasis olivaceus* | Olive Python | O | O | 12 |
| | *Morelia oenpelliensis* (T) | Oenpelli Rock Python | O | N | |
| | *Morelia spilota* | Carpet Python | D | O | 1, 12 |
| Colubridae | *Boiga irregularis* | Brown Tree Snake | D | O | 1, 12 |
| | *Dendrelaphis punctulata* | Common Tree Snake | D | O | 1, 12 |
| | *Fordonia leucobalia* | White-bellied Mangrove Snake | D | N | |
| | *Myron richardsoni* | Richardson's Mangrove Snake | D | N | |
| | *Stegonotus cucullatus* | Slaty-grey Snake | O | O | 4 |
| | *Tropidonophis mairii* | Freshwater Snake | O | N | |
| Elapidae | *Acanthophis praelongus* | Northern Death Adder | O | N | |
| | *Demansia atra* | Black Whipsnake | O | N | |
| | *Demansia olivacea* | Olive Whipsnake | O | N | |
| | *Demansia papuensis* | Greater Black Whipsnake | O | N | |
| | *Demansia simplex* | Grey Whipsnake | N | N | |
| | *Furina ornate* | Orange-naped Snake | O | N | |
| | *Oxyuranus scutellatus* | Taipan | O | N | |
| | *Pseudechis australis* | King Brown Snake | O | O | 12 |
| | *Pseudonaja nuchalis* | Western Brown Snake | O | N | |
| | *Rhinoplocephalus pallidiceps* | Northern Small-eyed Snake | O | N | |
| | *Simoselaps morrisi* | | D | N | |
| | *Simoselaps semifasciatus* | Half-girdled Snake | O | N | |
| | *Suta punctata* | Little Spotted Snake | O | N | |
| | *Suta suta* | Curl Snake | O | N | |
| | *Vermicella annulata* | Bandy-bandy | O | N | |
| | *Vermicella intermedia* | | O | N | |
| | *Vermicella vermiformis* | | O | N | |
| | *Vermicella multifasciata* | Northern Bandy-bandy | O | N | |
| Gekkonidae | *Crenadactylus ocellatus* | Clawless Gecko | O | N | |
| | *Diplodactylus ciliaris* | Spiny-tailed Gecko | D | O | 7 |
| | *Diplodactylus conspicillatus* | Fat-tailed Diplodactylus | O | N | |
| | *Diplodactylus occultus* (T) | Yellow-snouted Ground Gecko | D | N | |
| | *Diplodactylus robinsoni* | | N | N | |
| | *Diplodactylus stenodactylus* | Crowned Gecko | O | N | |
| | *Gehyra australis* | Northern Dtella | D | F | 4, 12 |
| | *Gehyra nana* | Northern Spotted Rock Dtella | O | O | 4 |
| | *Gehyra pamela* | Arnhemland Watercourse Dtella | O | O | 4 |
| | *Hemidactylus frenatus* | House Gecko | O | F | 7 |
| | *Heteronotia binoei* | Bynoe's Gecko | O | N | |
| | *Heteronotia planiceps* | | N | N | |
| | *Heteronotia spelea* | Desert Cave Gecko | O | N | |
| | *Nephrurus asper* | Rough Knob-tail | O | N | |
| | *Nephrurus sheai* | | O | N | |
| | *Oedura gemmata* | Dotted Velvet Gecko | O | O | 7 |
| | *Oedura marmorata* | Marbled Velvet Gecko | O | O | 7, 12 |
| | *Oedura rhombifer* | Zigzag Velvet Gecko | O | O | 7 |
| | *Pseudothecadactylus lindneri* | Giant Cave Gecko | O | N | |
| | *Rhynchoedura ornata* | Beaked Gecko | O | N | |
| Pygopodidae | *Delma borea* | Rusty-topped Delma | O | N | |
| | *Delma tincta* | Excitable Delma | O | N | |
| | *Lialis burtonis* | Burton's Snake-lizard | O | N | |
| | *Pygopus nigriceps* | Hooded Scaly Foot | O | N | |
| Scincidae | *Carlia amax* | Bauxite Rainbow-skink | O | N | |
| | *Carlia gracilis* | Slender Rainbow-skink | D | N | |
| | *Carlia longipes* | Closed-litter Rainbow-skink | D | N | |
| | *Carlia munda* | Shaded-litter Rainbow-skink | O | N | |
| | *Carlia rufilatus* | Red-sided Rainbow-skink | D | N | |
| | *Carlia triacantha* | Desert Rainbow-skink | O | N | |
| | *Cryptoblepharus carnabyi* | Spiny-palmed Shinning-skink | O | F | 7 |

APPENDIX I

| Family | Species name | Common name | Forest use | Hollow use | Source for hollow use |
|---|---|---|---|---|---|
| | *Cryptoblepharus litoralis* | Supralittoral Shinning-skink | O | N | |
| | *Cryptoblepharus megastictus* | Blotched Shinning-skink | O | N | |
| | *Cryptoblepharus plagiocephalus* | Callose-palmed Shinning-skink | D | F | 4, 12 |
| | *Ctenotus arnhemensis* | Jabiluka Ctenotus | O | N | |
| | *Ctenotus astictus* | | O | N | |
| | *Ctenotus borealis* | White-faced Ctenotus | O | N | |
| | *Ctenotus coggeri* | Brown-backed Ctenotus | O | N | |
| | *Ctenotus decaneurus* | Ten-lined Ctenotus | D | N | |
| | *Ctenotus essingtoni* | Lowlands Plain-backed Ctenotus | O | N | |
| | *Ctenotus gagudju* | Magela Ctenotus | D | N | |
| | *Ctenotus hilli* | Top-end Lowlands Ctenotus | D | N | |
| | *Ctenotus inornatus* | Bar-shouldered Ctenotus | O | N | |
| | *Ctenotus kurnbudj* | Kurnbudj Ctenotus | D | N | |
| | *Ctenotus militaris* | Soldier Ctenotus | O | N | |
| | *Ctenotus nasutus* | Long-Snouted Ctenotus | N | N | |
| | *Ctenotus pantherinus* | Leopard Ctenotus | O | N | |
| | *Ctenotus rimacolus (T, subspecis camptris only)* | | N | N | |
| | *Ctenotus robustus* | Robust Ctenotus | O | N | |
| | *Ctenotus spaldingi* | Straight-browed Ctenotus | O | N | |
| | *Ctenotus storri* | Buff-striped Ctenotus | D | N | |
| | *Ctenotus stuarti* | | D | N | |
| | *Ctenotus tantillus* | Kimberley Wedgesnout Ctenotus | O | N | |
| | *Ctenotus vertebralis* | Scant-striped Ctenotus | O | N | |
| | *Egernia arnhemensis* | Arnhem Land Egernia | O | N | |
| | *Egernia hosmeri* | Hosmer's Skink | O | N | |
| | *Eremiascincus fasciolatus* | Narrow-banded Sand-swimmer | O | N | |
| | *Eremiascincus richardsonii* | Broad-banded Sand-swimmer | O | N | |
| | *Glaphyromorphus crassicaudus* | Cape York Mulch-skink | O | N | |
| | *Glaphyromorphus darwiniensis* | Northern Mulch-skink | D | N | |
| | *Glaphyromorphus douglasi* | Orange-sided Bar-lipped Skink | D | N | |
| | *Glaphyromorphus isolepis* | Northern Bar-lipped Skink | O | N | |
| | *Glaphyromorphus nigricaudis* | Black-tailed Bar-lipped Skink | O | N | |
| | *Lerista bipes* | North-western Sandslider | O | N | |
| | *Lerista borealis* | Inland Kimberley Slider | O | N | |
| | *Lerista carpentariae* | Carpentaria Fine-lined Slider | O | N | |
| | *Lerista griffini* | Stout Sandslider | O | N | |
| | *Lerista karlschmidti* | Lesser Robust Fine-lined Slider | O | N | |
| | *Lerista orientalis* | North-eastern Orange-tailed Slider | O | N | |
| | *Lerista stylis* | Arnhem Coast Fine-lined Slider | O | N | |
| | *Lygisaurus macfarlani* | Translucent Litter-skink | D | N | |
| | *Menetia alanae* | Top End Dwarf Skink | D | N | |
| | *Menetia concinna* | Jabiluka Dwarf Skink | D | N | |
| | *Menetia greyii* | Common Dwarf Skink | O | N | |
| | *Menetia maini* | Northern Dwarf Skink | O | N | |
| | *Morethia ruficauda* | Lined Firetail Skink | O | N | |
| | *Morethia storri* | Top End Firetail Skink | O | N | |
| | *Notoscinus ornatus* | Ornate Soil-crevice Skink | O | N | |
| | *Proablepharus tenuis* | Northern Soil-crevice Skink | O | N | |
| | *Tiliqua multifasciata* | Centralian Bluetongue | O | N | |
| | *Tiliqua scincoides* | Eastern Bluetongue | O | N | |
| **Typhlopidae** | *Ramphotyphlops affinis* | Small-headed Blind Snake | O | N | |
| | *Ramphotyphlops braminus* | Flowerpot Blind Snake | O | N | |
| | *Ramphotyphlops broomi* | Faint-striped Blind Snake | O | N | |
| | *Ramphotyphlops diversus* | Northern Blind Snake | O | N | |
| | *Ramphotyphlops guentheri* | Top End Blind Snake | O | N | |
| | *Ramphotyphlops kimberleyensis* | Kimberley Shallow-soil Blind Snake | O | N | |
| | *Ramphotyphlops ligatus* | Robust Blind Snake | O | N | |
| | *Ramphotyphlops minimus* | Groote Dwarf Blind Snake | O | N | |
| | *Ramphotyphlops nema* | | O | N | |
| | *Ramphotyphlops tovelli* | Darwin Blind Snake | O | N | |

| Family | Species name | Common name | Forest use | Hollow use | Source for hollow use |
|---|---|---|---|---|---|
| | *Ramphotyphlops unguirostris* | Claw-snouted Blind Snake | O | N | |
| | *Ramphotyphlops wiedii* | Brown-snouted Blind Snake | O | N | |
| | *Ramphotyphlops yirrikalae* | Yirrkala Blind Snake | O | N | |
| **Varanidae** | *Varanus acanthurus* | Ridge-tailed Monitor | O | O | 10 |
| | *Varanus baritji* | Black-spotted Ridge-tailed Monitor | O | N | |
| | *Varanus glauerti* | Kimberley Rock Monitor | O | F | 10 |
| | *Varanus glebopalma* | Long-tailed Rock Monitor | O | N | |
| | *Varanus gouldii* | Gould's Goanna | O | O | 7 |
| | *Varanus indicus* | Mangrove Monitor | D | F | 7 |
| | *Varanus kingorum* | Pygmy Rock Monitor | O | N | |
| | *Varanus mertensi* | Merten's Water Monitor | O | O | 7 |
| | *Varanus mitchelli* | Mitchell's Water Monitor | D | O | 7, 12 |
| | *Varanus panoptes* | Yellow-spotted Monitor | O | N | |
| | *Varanus primordius* | Northern Blunt-spined Monitor | O | N | |
| | *Varanus scalaris* | Spotted Tree Monitor | D | F | 1, 12 |
| | *Varanus tristis* | Black-tailed Monitor | O | F | 1, 12 |
| **BIRDS** | | | | | |
| **Acanthizidae** | *Smicrornis brevirostris* | Weebill | D | N | |
| **Accipitridae** | *Accipiter cirrhocephalus* | Collared Sparrowhawk | D | N | |
| | *Accipiter fasciatus* | Brown Goshawk | D | N | |
| | *Accipiter novaehollandiae* | Grey Goshawk | D | N | |
| | *Aquila audax* | Wedge-tailed Eagle | O | N | |
| | *Aviceda subcristata* | Pacific Baza | D | N | |
| | *Circus approximans* | Swamp Harrier | N | N | |
| | *Circus assimilis* | Spotted Harrier | O | N | |
| | *Elanus axillaris* | Black-shouldered Kite | O | N | |
| | *Elanus scriptus* | Letter-winged Kite | O | N | |
| | *Erythrotriorchis radiatus (T)* | Red Goshawk | D | N | |
| | *Haliaeetus leucogaster* | White-bellied Sea-eagle | O | N | |
| | *Haliastur indus* | Brahminy Kite | O | N | |
| | *Haliastur sphenurus* | Whistling Kite | O | N | |
| | *Hamirostra melanosternon* | Black-breasted Buzzard | O | N | |
| | *Hieraaetus morphnoides* | Little Eagle | O | N | |
| | *Lophoictinia isura* | Square-tailed Kite | O | N | |
| | *Milvus migrans* | Black Kite | O | N | |
| | *Pandion haliaetus* | Osprey | O | N | |
| **Aegothelidae** | *Aegotheles cristatus* | Australian Owlet-nightjar | D | F | 3 |
| **Alaudidae** | *Mirafra javanica* | Singing Bushlark | O | N | |
| **Alcedinidae** | *Alcedo azurea* | Azure Kingfisher | D | N | |
| | *Alcedo pusilla* | Little Kingfisher | D | O | 3 |
| **Anatidae** | *Anas gracilis* | Grey Teal | O | F | 3 |
| | *Anas superciliosa* | Pacific Black Duck | O | F | 3 |
| | *Aythya australis* | Hardhead | N | N | |
| | *Chenonetta jubata* | Australian Wood Duck | O | F | 3 |
| | *Cygnus atratus* | Black Swan | N | N | |
| | *Dendrocygna arcuata* | Wandering Whistling-Duck | O | N | |
| | *Dendrocygna eytoni* | Plumed Whistling-Duck | O | N | |
| | *Malacorhynchus membranaceus* | Pink-eared Duck | O | F | 3 |
| | *Nettapus pulchellus* | Green Pygmy-goose | O | F | 3 |
| | *Tadorna radjah* | Radjah Shelduck | O | F | 3 |
| **Anhingidae** | *Anhinga melanogaster* | Darter | O | N | |
| **Anseranatidae** | *Anseranas semipalmata* | Magpie Goose | O | N | |
| **Apodidae** | *Apus pacificus* | Fork-tailed Swift | N | N | |
| | *Hirundapus caudacutus* | White-throated Needletail | N | N | |
| **Ardeidae** | *Ardea alba* | Great Egret | O | N | |
| | *Ardea ibis* | Cattle Egret | O | N | |
| | *Ardea intermedia* | Intermediate Egret | O | N | |
| | *Ardea pacifica* | White-necked Heron | O | N | |
| | *Ardea picata* | Pied Heron | O | N | |
| | *Ardea sumatrana* | Great-billed Heron | O | N | |

APPENDIX I

| Family | Species name | Common name | Forest use | Hollow use | Source for hollow use |
|---|---|---|---|---|---|
| | *Butorides striatus* | Striated Heron | O | N | |
| | *Egretta garzetta* | Little Egret | O | N | |
| | *Egretta novaehollandiae* | White-faced Heron | O | N | |
| | *Egretta sacra* | Eastern Reef Egret | O | N | |
| | *Ixobrychus flavicollis* | Black Bittern | O | N | |
| | *Nycticorax caledonicus* | Nankeen Night Heron | O | N | |
| **Artamidae** | *Artamus cinereus* | Black-faced Woodswallow | O | O | 3 |
| | *Artamus leucorynchus* | White-breasted Woodswallow | O | F | 3 |
| | *Artamus minor* | Little Woodswallow | O | O | 3 |
| | *Artamus personatus* | Masked Woodswallow | O | O | 3 |
| | *Artamus superciliosus* | White-browed Woodswallow | O | O | 3 |
| | *Cracticus nigrogularis* | *Pied Butcherbird* | O | N | |
| | *Cracticus quoyi* | Black Butcherbird | D | N | |
| | *Cracticus torquatus* | Grey Butcherbird | D | N | |
| | *Gymnorhina tibicen* | Australian Magpie | O | N | |
| **Burhinidae** | *Burhinus grallarius* | Bush Stone-curlew | O | N | |
| **Cacatuidae** | *Cacatua galerita* | Sulphur-crested Cockatoo | D | F | 3 |
| | *Cacatua roseicapilla* | Galah | O | F | 3 |
| | *Cacatua sanguinea* | Little Corella | O | F | 3 |
| | *Calyptorhynchus banksii* | Red-tailed Black-Cockatoo | D | F | 3 |
| | *Nymphicus hollandicus* | Cockatiel | O | F | 3 |
| **Campephagidae** | *Coracina novaehollandiae* | Black-faced Cuckoo-shrike | O | N | |
| | *Coracina papuensis* | White-bellied Cuckoo-shrike | O | N | |
| | *Coracina tenuirostris* | Cicadabird | D | N | |
| | *Lalage leucomela* | Varied Triller | D | N | |
| | *Lalage sueurii* | White-winged Triller | O | N | |
| **Caprimulgidae** | *Caprimulgus macrurus* | Large-tailed Nightjar | O | N | |
| | *Eurostopodus argus* | Spotted Nightjar | O | N | |
| **Casuariidae** | *Dromaius novaehollandiae* | Emu | O | N | |
| **Centropodidae** | *Centropus phasianinus* | Pheasant Coucal | O | N | |
| **Charadriidae** | *Charadrius ruficapillus* | Red-capped Plover | N | N | |
| | *Charadrius veredus* | Oriental Plover | N | N | |
| | *Elesyornis melanops* | Black-fronted Dotterel | N | N | |
| | *Erythogonys cinctus* | Red-kneed Dotterel | N | N | |
| | *Pluvialis fulva* | Pacific Golden Plover | N | N | |
| | *Vanellus miles* | Masked Lapwing | N | N | |
| **Ciconiidae** | *Ephippiorhynchus asiaticus* | Black-necked Stork | O | N | |
| **Climacteridae** | *Climacteris melanura* | Black-tailed Treecreeper | D | F | 3 |
| **Columbidae** | *Chalcophaps indica* | Emerald Dove | D | N | |
| | *Ducula bicolor* | Pied Imperial-Pigeon | D | N | |
| | *Geopelia cuneata* | Diamond Dove | O | O | 3 |
| | *Geopelia humeralis* | Bar-shouldered Dove | O | N | |
| | *Geopelia striata* | Peaceful Dove | O | N | |
| | *Geophaps plumifera* | Spinifex Pigeon | N | N | |
| | *Geophaps smithii* | Partridge Pigeon | D | N | |
| | *Ocyphaps lophotes* | Crested Pigeon | O | N | |
| | *Petrophassa albipennis* | White-quilled Rock-Pigeon | O | N | |
| | *Petrophassa rufipennis* | Chestnut-quilled Rock-pigeon | O | N | |
| | *Phaps chalcoptera* | Common Bronzewing | O | N | |
| | *Ptilinopus cinctus* | Banded Fruit-Dove | D | N | |
| | *Ptilinopus regina* | Rose-crowned Fruit-Dove | D | N | |
| **Coraciidae** | *Eurystomus orientalis* | Dollarbird | D | F | 3 |
| **Corcoracidae** | *Struthidea cinerea* | Apostlebird | O | N | |
| **Corvidae** | *Corvus orru* | Torresian Crow | O | N | |
| **Cuculidae** | *Cacomantis variolosus* | Brush Cuckoo | D | N | |
| | *Chrysococcyx basalis* | Horsfield's Bronze-Cuckoo | O | N | |
| | *Chrysococcyx minutillus* | Little Bronze-Cuckoo | D | N | |
| | *Chrysococcyx osculans* | Black-eared Cuckoo | O | N | |
| | *Cuculus pallidus* | Pallid Cuckoo | O | N | |
| | *Cuculus saturatus* | Oriental Cuckoo | D | N | |

| Family | Species name | Common name | Forest use | Hollow use | Source for hollow use |
|---|---|---|---|---|---|
| | *Eudynamys scolopacea* | Common Koel | D | N | |
| | *Scythrops novaehollandiae* | Channel-billed Cuckoo | D | N | |
| **Dicaeidae** | *Dicaeum hirundinaceum* | Mistletoebird | D | N | |
| | *Dicrurus bracteatus* | Spangled Drongo | D | N | |
| | *Grallina cyanoleuca* | Magpie-lark | O | N | |
| | *Myiagra alecto* | Shining Flycatcher | D | N | |
| | *Myiagra inquieta* | Restless Flycatcher | O | N | |
| | *Myiagra rubecula* | Leaden Flycatcher | D | N | |
| | *Myiagra ruficollis* | Broad-billed Flycatcher | D | N | |
| | *Rhipidura fuliginosa* | Grey Fantail | O | N | |
| | *Rhipidura leucophrys* | Willie Wagtail | O | N | |
| | *Rhipidura phasiana* | Mangrove Grey Fantail | D | N | |
| | *Rhipidura rufifrons* | Rufous Fantail | D | N | |
| | *Rhipidura rufiventris* | Northern Fantail | D | N | |
| **Estrildidae** | *Neochmia phaeton* | Crimson Finch | D | N | |
| | *Neochmia ruficauda* | Star Finch | O | N | |
| **Falconidae** | *Falco berigora* | Brown Falcon | O | N | |
| | *Falco cenchroides* | Nankeen Kestrel | O | O | 3 |
| | *Falco hypoleucos* | Grey Falcon | O | N | |
| | *Falco longipennis* | Australian Hobby | O | N | |
| | *Falco peregrinus* | Peregrine Falcon | O | O | 3 |
| | *Falco subniger* | Black Falcon | O | N | |
| **Glareolidae** | *Glareola maldivarum* | Oriental Pratincole | N | N | |
| | *Stiltia Isabella* | Australian Pratincole | N | N | |
| **Gruidae** | *Grus antigone* | Sarus Crane | N | N | |
| | *Grus rubicunda* | Brolga | N | N | |
| **Halcyonidae** | *Dacelo leachii* | Blue-winged Kookaburra | D | F | 3 |
| | *Todiramphus chloris* | Collared Kingfisher | D | F | 3 |
| | *Todiramphus macleayii* | Forest Kingfisher | D | O | 3 |
| | *Todiramphus pyrrhopygia* | Red-backed Kingfisher | O | O | 3 |
| | *Todiramphus sanctus* | Sacred Kingfisher | D | O | 3 |
| **Hirundinidae** | *Hirundo ariel* | Fairy Martin | O | O | 1 |
| | *Hirundo nigricans* | Tree Martin | D | F | 3 |
| | *Hirundo rustica* | Barn Swallow | O | N | |
| **Jacanidae** | *Irediparra gallinacea* | Comb-crested Jacana | N | N | |
| **Maluridae** | *Amytornis dorotheae* (T) | Carpentarian Grasswren | O | N | |
| | *Amytornis woodwardi* (T) | White-throated Grasswren | O | N | |
| | *Malurus coronatus* | Purple-crowned Fairy-wren | O | N | |
| | *Malurus lamberti* | Variegated Fairy-wren | O | N | |
| | *Malurus melanocephalus* | Red-backed Fairy-wren | O | N | |
| **Megapodiidae** | *Megapodius reinwardt* | Orange-footed Scrubfowl | D | N | |
| **Meliphagidae** | *Certhionyx pectoralis* | Banded Honeyeater | D | N | |
| | *Conopophila albogularis* | Rufous-banded Honeyeater | D | N | |
| | *Conopophila rufogularis* | Rufous-throated Honeyeater | D | N | |
| | *Entomyzon cyanotis* | Blue-faced Honeyeater | D | N | |
| | *Epthianura crocea* (T) | Yellow Chat | N | N | |
| | *Grantiella picta* | Painted Honeyeater | D | N | |
| | *Lichenostomus flavescens* | Yellow-tinted Honeyeater | D | N | |
| | *Lichenostomus unicolor* | White-gaped Honeyeater | D | N | |
| | *Lichenostomus virescens* | Singing Honeyeater | O | N | |
| | *Lichmera indistincta* | Brown Honeyeater | O | N | |
| | *Manorina flavigula* | Yellow-throated Miner | D | N | |
| | *Meliphaga albilineata* | White-lined Honeyeater | D | N | |
| | *Melithreptus albogularis* | White-throated Honeyeater | D | N | |
| | *Melithreptus gularis* | Golden-backed Honeyeater | D | N | |
| | *Myzomela erythrocephala* | Red-headed Honeyeater | D | N | |
| | *Myzomela obscura* | Dusky Honeyeater | D | N | |
| | *Philemon argenticeps* | Silver-crowned Friarbird | D | N | |
| | *Philemon buceroides* | Helmeted Friarbird | D | N | |
| | *Philemon citreogularis* | Little Friarbird | D | N | |

| Family | Species name | Common name | Forest use | Hollow use | Source for hollow use |
|---|---|---|---|---|---|
| | *Ramsayornis fasciatus* | Bar-breasted Honeyeater | D | N | |
| **Meropidae** | *Merops ornatus* | Rainbow Bee-eater | O | N | |
| **Motacillidae** | *Motacilla flava* | Yellow Wagtail | N | N | |
| | *Anthus novaeseelandiae* | Richard's Pipit | N | N | |
| **Neosittidae** | *Daphoenositta chrysoptera* | Varied Sittella | D | N | |
| **Oriolidae** | *Oriolus flavocinctus* | Yellow Oriole | D | N | |
| | *Oriolus sagittatus* | Olive-backed Oriole | D | N | |
| | *Sphecotheres viridis* | Figbird | D | N | |
| **Otididae** | *Ardeotis australis* | Australian Bustard | O | N | |
| **Pachycephalidae** | *Colluricincla harmonica* | Grey Shrike-thrush | D | O | 3 |
| | *Colluricincla megarhyncha* | Little Shrike-thrush | D | N | |
| | *Colluricincla woodwardi* | Sandstone Shrike-thrush | O | N | |
| | *Falcunculus frontatus* | Crested Shrike-tit | D | N | |
| | *Pachycephala lanioides* | White-breasted Whistler | D | N | |
| | *Pachycephala melanura* | Mangrove Golden Whistler | D | N | |
| | *Pachycephala rufiventris* | Rufous Whistler | D | N | |
| | *Pachycephala simplex* | Grey Whistler | D | N | |
| **Pardalotidae** | *Gerygone chloronotus* | Green-backed Gerygone | D | N | |
| | *Gerygone levigaster* | Mangrove Gerygone | D | N | |
| | *Gerygone magnirostris* | Large-billed Gerygone | D | N | |
| | *Gerygone olivacea* | White-throated Gerygone | O | N | |
| | *Pardalotus rubricatus* | Red-browed Pardalote | O | N | |
| | *Pardalotus striatus* | Striated Pardalote | D | F | 3 |
| **Passeridae** | *Erythrura gouldiae (T)* | Gouldian Finch | D | F | 3 |
| | *Heteromunia pectoralis* | Pictorella Mannikin | O | N | |
| | *Lonchura castaneothorax* | Chestnut-breasted Mannikin | O | N | |
| | *Lonchura flaviprymna* | Yellow-rumped Mannikin | O | N | |
| | *Poephila acuticauda* | Long-tailed Finch | O | O | 5 |
| | *Poephila personata* | Masked Finch | O | N | |
| | *Taeniopygia bichenovii* | Double-barred Finch | O | N | |
| | *Taeniopygia guttata* | Zebra Finch | O | O | 3 |
| **Pelecanidae** | *Pelecanus conspicillatus* | Australian Pelican | N | N | |
| **Petroicidae** | *Eopsaltria pulverulenta* | Mangrove Robin | D | N | |
| | *Melanodryas cucullata (T, subspecies melvillensis only)* | Hooded Robin | D | O | 3 |
| | *Microeca fascinans* | Jacky Winter | O | N | |
| | *Microeca flavigaster* | Lemon-bellied Flycatcher | D | N | |
| | *Poecilodryas superciliosa* | White-browed Robin | D | N | |
| **Phalacrocoracidae** | *Phalacrocorax carbo* | Great Cormorant | O | N | |
| | *Phalacrocorax melanoleucos* | Little Pied Cormorant | O | N | |
| | *Phalacrocorax sulcirostris* | Little Black Cormorant | O | N | |
| | *Phalacrocorax varius* | Pied Cormorant | O | N | |
| **Phasianidae** | *Coturnix chinensis* | King Quail | O | N | |
| | *Coturnix ypsilophora* | Brown Quail | O | N | |
| **Pittidae** | *Pitta iris* | Rainbow Pitta | D | N | |
| **Podargidae** | *Podargus strigoides* | Tawny Frogmouth | D | N | |
| **Podicipedidae** | *Podiceps cristatus* | Great Crested Grebe | N | N | |
| | *Poliocephalus poliocephalus* | Hoary-headed Grebe | N | N | |
| | *Tachybaptus novaehollandiae* | Australasian Grebe | N | N | |
| **Pomatostomidae** | *Pomatostomus temporalis* | Grey-crowned Babbler | D | N | |
| **Psittacidae** | *Aprosmictus erythropterus* | Red-winged Parrot | D | F | 3 |
| | *Melopsittacus undulatus* | Budgerigar | O | F | 3 |
| | *Platycercus venustus* | Northern Rosella | D | F | 3 |
| | *Psephotus dissimilis* | Hooded Parrot | O | N | |
| | *Psitteuteles versicolor* | Varied Lorikeet | D | F | 3 |
| | *Trichoglossus haematodus* | Rainbow Lorikeet | D | F | 3 |
| **Ptilonorhynchidae** | *Chlamydera nuchalis* | Great Bowerbird | D | N | |
| **Rallidae** | *Amaurornis olivaceus* | Bush-hen | O | N | |
| | *Eulabeornis castaneoventris* | Chestnut Rail | D | N | |
| | *Fulica atra* | Eurasian Coot | N | N | |
| | *Gallinula tenebrosa* | Dusky Moorhen | N | N | |

| Family | Species name | Common name | Forest use | Hollow use | Source for hollow use |
|---|---|---|---|---|---|
| | *Gallirallus philippensis* | Buff-banded Rail | O | O | 6 |
| | *Porphyrio porphyrio* | Purple Swamphen | N | N | |
| | *Porzana cinerea* | White-browed Crake | N | N | |
| | *Porzana pusilla* | Baillon's Crake | N | N | |
| | *Porzana tabuensis* | Spotless Crake | N | N | |
| ***Recurvirostridae*** | *Himantopus himantopus* | Black-winged Stilt | N | N | |
| | *Recurvirostra novaehollandiae* | Red-necked Avocet | N | N | |
| ***Scolopacidae*** | *Actitis hypoleucos* | Common Sandpiper | O | N | |
| | *Calidris acuminata* | Sharp-tailed Sandpiper | N | N | |
| | *Calidris ferruginea* | Curlew Sandpiper | N | N | |
| | *Calidris ruficollis* | Red-necked Stint | N | N | |
| | *Gallinago hardwickii* | Latham's Snipe | N | N | |
| | *Heteroscelus brevipes* | Grey-tailed Tattler | O | N | |
| | *Limosa limosa* | Black-tailed Godwit | N | N | |
| | *Numenius madagascariensis* | Eastern Curlew | O | N | |
| | *Numenius minutus* | Little Curlew | N | N | |
| | *Numenius phaeopus* | Whimbrel | O | N | |
| | *Tringa glareola* | Wood Sandpiper | N | N | |
| | *Tringa nebularia* | Common Greenshank | N | N | |
| | *Tringa stagnatilis* | Marsh Sandpiper | N | N | |
| ***Strigidae*** | *Ninox connivens* | Barking Owl | D | F | 9 |
| | *Ninox novaeseelandiae* | Southern Boobook | O | F | 9 |
| | *Ninox rufa* | Rufous Owl | D | F | 3 |
| ***Sylviidae*** | *Acrocephalus stentoreus* | Clamorous Reed-Warbler | N | N | |
| | *Cincloramphus cruralis* | Brown Songlark | O | N | |
| | *Cincloramphus mathewsi* | Rufous Songlark | O | N | |
| | *Cisticola exilis* | Golden-headed Cisticola | N | N | |
| | *Cisticola juncidis* | Zitting Cisticola | N | N | |
| | *Megalurus timoriensis* | Tawny Grassbird | N | N | |
| ***Threskiornithidae*** | *Platalea flavipes* | Yellow-billed Spoonbill | O | N | |
| | *Platalea regia* | Royal Spoonbill | O | N | |
| | *Plegadis falcinellus* | Glossy Ibis | O | N | |
| | *Threskiornis molucca* | Australian White Ibis | O | N | |
| | *Threskiornis spinicollis* | Straw-necked Ibis | O | N | |
| ***Turnicidae*** | *Turnix castanota* | Chestnut-backed Button-quail | O | N | |
| | *Turnix maculosa* | Red-backed Button-quail | O | N | |
| | *Turnix pyrrhothorax* | Red-chested Button-quail | O | N | |
| | *Turnix velox* | Little Button-quail | O | N | |
| ***Tytonidae*** | *Tyto alba* | Barn Owl | O | F | 3 |
| | *Tyto capensis* | Grass Owl | N | N | |
| | *Tyto novaehollandiae (T, subspecies melvillensis only)* | Masked Owl | D | F | 3 |
| ***Zosteropidae*** | *Zosterops luteus* | Yellow White-eye | D | N | |
| ***MAMMALS*** | | | | | |
| **Monotremes** | | | | | |
| ***Tachyglossidae*** | *Tachyglossus aculeatus* | Short-beaked Echidna | O | N | |
| **Marsupials** | | | | | |
| ***Dasyuridae*** | *Antechinus bellus* | Fawn Antechinus | D | F | 2 |
| | *Dasyurus hallucatus* | Northern Quoll | D | O | 2 |
| | *Phascogale tapoatafa (T)* | Brush-tailed Phascogale | D | F | 2 |
| | *Planigale ingrami* | Long-tailed Planigale | O | N | |
| | *Planigale maculata* | Common Planigale | O | O | 7 |
| | *Pseudantechinus bilarni* | Sandstone Antechinus | O | N | |
| | *Pseudantechinus mimulus (T)* | Carpentarian Pseudantechinus | O | N | |
| | *Pseudantechinus ningbing* | Ningbing Pseudantechinus | O | N | |
| | *Sminthopsis bindi* | Kakadu Dunnart | O | N | |
| | *Sminthopsis butleri (T)* | Carpentarian Dunnart | O | N | |
| | *Sminthopsis virginiae* | Red-cheeked Dunnart | O | N | |
| ***Macropodidae*** | *Macropus agilis* | Agile Wallaby | O | N | |
| | *Macropus antilopinus* | Antilopine Wallaroo | O | N | |
| | *Macropus bernardus* | Black Wallaroo | O | N | |

| Family | Species name | Common name | Forest use | Hollow use | Source for hollow use |
|---|---|---|---|---|---|
| | *Macropus robustus* | Common Wallaroo | O | N | |
| | *Onychogalea unguifera* | Northern Nail-tail Wallaby | O | N | |
| | *Petrogale brachyotis* | Short-eared Rock-wallaby | O | N | |
| | *Petrogale concinna* | Nabarlek | O | N | |
| ***Peramelidae*** | *Isoodon auratus (T)* | Golden Bandicoot | O | N | |
| | *Isoodon macrourus* | Northern Brown Bandicoot | O | N | |
| ***Petauridae*** | *Petaurus breviceps* | Sugar Glider | D | F | 2 |
| | *Petropseudes dahli* | Rock Ringtail Possum | O | N | |
| ***Phalangeridae*** | *Trichosurus vulpecula* | Brushtail Possum | D | F | 2 |
| Eutherians | | | | | |
| Bats | | | | | |
| ***Emballonuridae*** | *Saccolaimus flaviventris* | Yellow-bellied Sheathtail-bat | O | F | 8 |
| | *Saccolaimus saccolaimus* | Bare-rumped Sheathtail-bat | D | F | 8, |
| | *Taphozous georgianus* | Common Sheathtail-bat | O | O | 7 |
| | *Taphozous kapalgensis* | Arnhem Sheathtail-bat | O | O | 1 |
| ***Hipposideridae*** | *Hipposideros ater* | Dusky Leafnosed-bat | D | O | 2 |
| | *Hipposideros inornata (T)* | Arnhem Leafnosed-bat | D | N | |
| | *Hipposideros stenotis* | Northern Leafnosed-bat | O | N | |
| | *Rhinonycteris aurantius* | Orange Leafnosed-bat | O | N | 8 |
| ***Megadermatidae*** | *Macroderma gigas* | Ghost Bat | O | N | |
| ***Molossidae*** | *Chaerephon jobensis* | Northern Freetail-bat | D | F | 2 |
| | *Mormopterus beccarii* | Beccari's Freetail-bat | O | F | 2 |
| | *Mormopterus loriae* | Little Northern Freetail Bat | D | F | 2 |
| ***Pteropodidae*** | *Macroglossus minimus* | Northern Blossom Bat | D | O | 8 |
| | *Pteropus alecto* | Black Flying-fox | D | N | |
| | *Pteropus scapulatus* | Little Red Flying-fox | D | N | |
| ***Vespertilionidae*** | *Chalinolobus gouldii* | Gould's Wattled Bat | O | F | 8 |
| | *Chalinolobus nigrogriseus* | Hoary Wattled Bat | O | F | 8 |
| | *Miniopterus schreibersii* | Common Bent-wing Bat | O | N | |
| | *Myotis moluccarum* | Large-footed Myotis | O | O | 8 |
| | *Nyctophilus arnhemensis* | Northern Long-eared Bat | D | N | 8 |
| | *Nyctophilus bifax* | Eastern Long-eared Bat | D | F | 8 |
| | *Nyctophilus geoffroyi* | Lesser Long-eared Bat | O | F | 8 |
| | *Nyctophilus walkeri* | Pygmy Long-eared Bat | O | N | |
| | *Pipistrellus adamsi* | Cape York Pipistrelle | D | F | 8 |
| | *Pipistrellus westralis* | Northern Pipistrelle | D | O? | 8 |
| | *Scotorepens greyii* | Little Broad-nosed Bat | O | F | 8 |
| | *Scotorepens sanborni* | Northern Broad-nosed Bat | O | F | 8 |
| | *Vespadelus caurinus* | Western cave Bat | O | N | |
| Rodents | | | | | |
| Muridae | *Conilurus penicillatus (T)* | Brush-tailed Tree-rat | D | F | 2 |
| | *Hydromys chrysogaster* | Water Rat | O | N | |
| | *Leggadina lakedownensis* | Lakeland Downs Mouse | O | N | |
| | *Melomys burtoni* | Grassland Melomys | O | O | 2 |
| | *Mesembriomys gouldii* | Black-footed Tree-rat | D | F | 2, 14 |
| | *Mesembriomys macrurus (T)* | Golden-backed Tree-rat | D | F | 11 |
| | *Notomys aquilo (T)* | Northern Hopping-mouse | O | N | |
| | *Pseudomys calabyi* | Kakadu Pebble-mound Mouse | O | N | |
| | *Pseudomys delicatulus* | Delicate Mouse | O | N | |
| | *Pseudomys laborifex* | Kimberley Mouse | O | N | |
| | *Pseudomys nanus* | Western Chestnut Mouse | O | N | |
| | *Rattus colletti* | Dusky Rat | O | N | |
| | *Rattus tunneyi* | Pale Field-rat | D | N | |
| | *Rattus villosissimus* | Long-haired Rat | O | N | |
| | *Xeromys myoides (T)* | False Water Rat | O | N | |
| | *Zyzomys argurus* | Common Rock-rat | O | N | |
| | *Zyzomys maini (T)* | Arnhem Land Rock-rat | D | N | |
| Canids | | | | | |
| Canidae | *Canis familiaris* | Dingo | O | N | |